

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-17 (canceled).

Claim 18 (previously presented): An organic photosensitive optoelectronic device comprising in order:

an anode,

a first subcell comprising an electron donor layer and an electron acceptor layer;

an electron-hole recombination zone;

a second subcell comprising an electron donor layer and an electron acceptor layer;

and

a cathode,

wherein, the electron-hole recombination zone is less than about 20 Å in thickness; and

wherein, upon illumination of the device, the current generated in the first subcell and the current generated in the second subcell differ by less than about 10 %.

Claim 19 (previously presented): The device of claim 18, wherein the device further comprises additional subcells separated by electron-hole recombination zones, wherein the current generated by each subcell differs by less than about 10 %.

Claim 20 (previously presented): The device of claim 18, wherein the device further comprises an exciton blocking layer.

Claim 21 (previously presented): The device of claim 20, wherein the exciton blocking layer comprises BCP.

Claim 22 (previously presented): The device of claim 18, wherein the electron-hole recombination zone is a semitransparent metal layer.

Claim 23 (previously presented): The device of claim 22, wherein the semitransparent metal layer is selected from a layer of Ag, Li, LiF, Al, Ti and Sn.

Claim 24 (previously presented): The device of claim 23, wherein the semitransparent metal layer is a layer of Ag.

Claim 25 (previously presented): The device of claim 22, wherein the semitransparent metal layer is about 5 Å in thickness.

Claim 26 (previously presented): The device of claim 22, wherein the semitransparent metal layer is composed of nanoparticles.

Claim 27 (previously presented): The device of claim 18, wherein the device further comprises an anode-smoothing layer.

Claim 28 (previously presented): The device of claim 27, wherein the anode-smoothing layer comprises PEDOT.

Claim 29 (previously presented): The device of claim 18, wherein the electron donor layer comprises a phthalocyanine or a porphyrin, and the electron acceptor layer comprises a perylene, naphthalene, fullerene or nanotubule.

Claim 30 (previously presented): An organic photosensitive optoelectronic device comprising in order:

an anode,

multiple subcells in series, each subcell comprising:

an electron donor layer, and
an electron acceptor layer in contact with the electron donor layer,
and wherein a nanoparticle layer separates the subcells; and
a cathode,
wherein, upon illumination of the device, the current generated by each subcell is about equal.

Claim 31 (previously presented): The device of claim 30, wherein the device further comprises an exciton blocking layer.

Claim 32 (previously presented): The device of claim 31, wherein the exciton blocking layer comprises BCP.

Claim 33 (previously presented): The device of claim 30, wherein the nanoparticle layer comprises nanoparticles of Ag, Li, LiF, Al, Ti or Sn.

Claim 34 (previously presented): The device of claim 33, wherein the nanoparticle layer is Ag.

Claim 35 (previously presented): The device of claim 30, wherein the device further comprises an anode-smoothing layer.

Claim 36 (previously presented): The device of claim 35, wherein the anode-smoothing layer comprises PEDOT.

Claim 37 (previously presented): The device of claim 30, wherein the electron donor layer comprises a phthalocyanine or a porphyrin, and the electron acceptor layer comprises a perylene, naphthalene, fullerene or nanotubule.

Claim 38 (new): An organic photosensitive optoelectronic device comprising:

an anode,

multiple subcells in series, each subcell comprising:

an electron donor layer, and

an electron acceptor layer in contact with the electron donor layer,

a layer comprising nanoparticles between each subcell, and

a cathode,

wherein, upon illumination of the device, the current generated by each subcell differs by less than about 10 %.

Claim 39 (new): The device of claim 38, wherein the are Ag, Li, LiF, Al, Ti or Sn.